



EX PARTE OR LATE FILED

RECEIVED

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE DEPUTY SECRETARY

NOV - 4 1996

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

96-45

November 4, 1996

MEMORANDUM

To: Members of the Joint Board

From: Linda G. Roberts *Linda G. Roberts*  
Director, Office of Educational Technology

Subject: Telecommunications Access Cost for School Districts

The American Association of School Administrators, Consortium for School Networking, Council of Greater City Schools, and the National Rural Education Association conducted an informal survey in August 1996, to better understand what school districts are paying in access charges and forwarded the results to my office. It is my belief that these results coupled with information collected by the Department of Education and NTIA, provides useful insights that will assist the Joint Board in its deliberations.

These informal case studies demonstrate the great unevenness that school districts face in access cost for telecommunications and Internet services. The cases also point to higher costs for rural school districts and for those schools and districts that have not been able to aggregate demand or benefit from State purchasing or other institutional arrangements. In addition, there are several examples of high-poverty schools (in urban as well as in rural school districts) paying high rates for telecommunications access. Some examples include:

- **Detroit Public Schools in Detroit, Michigan** have 63 percent of its students eligible for free or reduced price lunch. The district is paying \$500 per month for each of the five T-1 lines it leases. Despite the need for more bandwidth, the best the district can provide at this time is 56 kbs to 120 schools out of a total of 287 schools. The District's immediate goal is to provide 12 additional T-1 lines in order to provide Internet service to its high schools.
- **Lakeview County School District in Lakeview, Oregon**, has 26 percent of its students eligible for free or reduced price lunch. The district is paying \$2,080 per month for T-1 access.

No. of Copies rec'd 0  
List ABOVE

- **St. Paul Public Schools, Minnesota** has 48.6 percent of its students eligible for free or reduced lunch. The district is paying \$470 per month for T-1 access.
- **Sulphur School District in Oklahoma** has 43 percent of its students eligible for free or reduced price lunch. The district is paying \$695 per month for T-1 access.
- **Hinds County School District in Raymond, Mississippi**, has 54 percent of its students eligible for free or reduced price lunch. The district is paying \$540 per month for T-1 access.
- **Clark County School District in Las Vegas, Nevada**, has 22.3 percent of its students eligible for free or reduced price lunch. Clark County is one of the fastest growing schools districts in America. In fact, for the next two years, Clark County will have to build one classroom a day, seven days a week, to meet the growing demand..

Currently, the district is paying \$899 per month for T-1 lines and will soon add six more. Clark County school officials note that they need to migrate to full T-1 access for all schools in the near future and expect to add 200 new T-1 lines to “provide a minimum level of service” at an average cost of \$350 per T-1 line per month. Clark County estimates that it will soon be paying approximately \$75,000 per month for T-1 lines -- at an annual cost of \$900,000 per year -- yet, County officials are already conceding that this bandwidth will be inadequate to meet their long term needs.

- **Milwaukee School District** has 47.1 percent of its students eligible for free or reduced price lunch. The district is paying \$800 per month for T-1 access.

This informal survey suggests a pattern of unevenness in the level of service with some school districts (Clark County, for example) making ambitious plans at a high cost, while other school districts (such as Detroit Public Schools) are already being forced to compromise their level of service.

Attachment: Tables I-X

**Table I**  
**Telecommunications Costs for Schools: Four Examples\***  
**(Access Costs Vary Greatly)**

	Fresno Unified School District, Fresno, CA 78,000 Students	State of Texas	Chittenden South School District, Hinesburg, VT 4,000 Students	Girard Unified School District, Girard, KS 1,200 Students
Cost of T-1 line (1.5 mbps), per month	\$180 Per Site 93 Sites	\$260-450 Per Site	\$1,100	\$2,000
Cost of Internet Access, per month	\$25 Per Terminal	\$200 for District	\$3,000 for District	\$20 Per Classroom
Contract terms	California PUC-Negotiated Rate	State-Mandated 25% Education Discount; Costs Vary By Region and Provider	State Forbids Discount; District Pays Commercial Rates. Internet Access is Provided by the State	No Discounts. District Purchases Services

\*Based on informal telephone interviews conducted by U.S. Departments of Education and Commerce (NTIA), July 16, 1996.

**Table II**

**Telecommunications Costs for School Districts: Urban - Rural Comparisons\***  
**(In Michigan and Oregon, Rural Areas are Paying Substantially More)**

	Cedar Springs School District, Michigan (Rural) 2,797 Students	Northview School District, Michigan (Urban) 3,224 Students	Lakeview County School District, Lakeview, Oregon (Rural) 541 Students	Portland Public School, Oregon (Urban) 53,370 Students
Cost of T-1 line (1.5 mbps), per month	\$570	\$250	\$2,080	\$237
Cost of Internet Access, per month	\$425 Covers 4 Schools	\$425 Covers 7 Schools	\$60,000 Per Year for State. State Provides to the School District	\$60,000 Per Year for State. State Provides to the School District
Contract terms	ESA Negotiates Contracts With Costs Varying by Regions and Providers.	ESA Negotiates Contracts With Costs Varying by Regions and Providers.	Cooperative	Cooperative

\*Based on informal survey and interviews conducted by American Association of School Administrators and the Consortium for School Networking, August, 1996.

**Table III**  
**Telecommunications Costs for School Districts: Urban--Rural Comparisons\***  
**( In Washington State, Rural Areas are Paying Substantially More)**

	Oakesdale School District #324 Oakesdale Washington (Rural) 160 Students	White Salmon School District, Washington (Rural) 1,305 Students	Vancouver School District, Washington (Urban) 18,814 Students	Spokane, Washington (Urban) 29,540 Students
Cost of T-1 line (1.5 mbps), per month	\$300 Expected to Increase	\$2,100	\$125	\$85 for a 256 kbs
Cost of Internet Access, per month	Included in the \$300 per month charge. Covers 2 Schools	\$60,000 Per Year/State Provides Free to SD, Plus \$120/mo Dial-Up Charge. Covers 3 Schools.	\$60,000 Per Year/State Provides Free to SD, Plus \$120/mo Dial-Up Charge. Covers 32 Schools.	\$850 for 55 Locations
Contract terms	Service provided by Washington School Information Processing Services.	Cooperative	Cooperative	District Contract With Local Provider

\*Based on informal survey and interviews conducted by American Association of School Administrators and the Consortium for School Networking, August, 1996.

**Table IV**  
**Telecommunications Costs for School Districts: Selected Examples by Size of Student Enrollment**  
**(Small Schools Tend to Pay More for Access)**

	Sulphur School District, Oklahoma 1,500 Students	River Falls School District, Wisconsin 2,784 Students	Gateway School District Monroeville, Pennsylvania 3,224 Students	Hinds County Public School Raymond, Mississippi 5,579 Students
Cost of T-1 line (1.5 mbps), per month	\$695	\$250 Based on 5 Year Contract	\$450	\$540
Cost of Internet Access, per month	\$400 Covers 4 Schools	5 Schools Included	\$250 Covers 8 Schools	\$15-20 Per Line, No Additional Cost Over State Network to 10 Schools
Contract terms	State Contract	University Provides Access	District Contract	State Negotiated

\*Based on informal survey and interviews conducted by American Association of School Administrators, National Rural Education Association, and the Consortium for School Networking, August, 1996.

**Table V**  
**Telecommunications Costs for School Districts: Selected Examples by Size of Student Enrollment \***

	Idaho Falls School District, Idaho 11,275 students	Fort Smith School District, Arkansas 12,618 students	Springfield Public Schools Massachusetts 23,823 students	Humboldt County Office of Education Eureka, CA 27,505 Students
Cost of T-1 line (1.5 mbps), per month	\$238 for T-1 Frame Relay and \$373 for 64 kbs Frame Relay	\$550	\$250	\$558
Cost of Internet Access, per month	\$250 covers 19 schools	\$80,000 per year by State, free to school Dist, 28 schools	\$1,000 per year. 20 hours per month per account. Additional accounts \$120. 43 schools	\$793 for County School Districts Each Pay \$100 32 Districts
Contract terms	State Cooperative	State Contract	Federal/State Contract MCET and MEOL	CSU Net, Independent Educational Network

\*Based on informal survey and interviews conducted by American Association of School Administrators the Consortium for School Networking, August, 1996.

**Table VI**

**Telecommunications Costs for School Districts: Selected Examples by Size of Student Enrollment\***

	Colorado Springs School District 54 Schools 32,198 Students	St. Paul Public Schools MN, 36,286 Students	Winston-Salem/Forsyth Co. School District 38,876 Students	Minneapolis Public Schools, Minnesota 85 Schools 48,500 Students
Cost of T-1 line (1.5 mbps), per month	\$216	\$470	\$375	\$500 for District Access
Cost of Internet Access, per month	\$1,833 for District	\$500 School District 64 Schools	\$1,500 School District 58 Schools	\$ 70 per month, plus \$5,500 for start-up
Contract terms	Commercial Providers	Cooperative Vendor	District Pays Corp Rate	Best available deal

\*Based on informal survey and interviews conducted by American Association of School Administrators and the Consortium for School Networking, August 1996.



**Table VII**  
**Telecommunications Costs for School Districts: Selected Examples by Size of Student Enrollment\***

	Memphis City Schools, Tennessee 168 Schools 107,218 Students	Clark County School District Las Vegas, Nevada 145,327 Students	Houston Independent School District Texas 192,991 Students	Dade County Public Schools, Miami, FL 320 Schools 333,444 Students
Cost of T-1 line (1.5 mbps), per month	\$2,750	\$890	\$300	Not Available \$1,000 Installation Fee
Cost of Internet Access, per month	Internet Included in Monthly T-1 Charge 168 Schools	\$30 per school 191 Schools	\$7,000 for School District 245 Schools	Internet Included in Monthly T-1 Charge 320 Schools
Contract terms	Cooperative Vendor	District Contract	State Negotiated	State Contract Through Florida Resource Network

\*Based on informal survey and interviews conducted by the Council of Greater City Schools, August 1996.

**Table VIII**  
**Telecommunications Costs for Schools: Selected Educational Service Agencies\*\* Examples:**  
**(Aggregating Demand Can Increase Purchasing Power)**

	Bucks County Philadelphia, PA, ESA 83,810 Students	Marion Center Salem, OR, ESA 25,087 Students	Polk County, OR, ESA 6,000 Students	Wayne-Finger Lakes BOCES, ESA, NY 44,351 Students
Cost of T-1 line (1.5 mbps), per month	\$405 \$2,700 One Time Installation Fee	\$450	\$450	\$4,833
Cost of Internet Access, per month	\$400 13 School District	\$115 District Wide 22 Districts	\$29 Per School 4 Districts	\$150 25 Districts
Contract terms	Regional Contract With Bell Atlantic and Internet Provider	Cooperative Agreement	District Purchased Services	NA

\*Based on informal survey and interviews conducted by American Association of School Administrators, National Rural Education Association, and the Consortium for School Networking, August, 1996.

\*\* Educational Services Agencies provide school districts within a state with an array of services including telecommunications. These agencies can aggregate purchasing power and provide school districts with lower access cost.

**Table IX**  
**Telecommunications Costs for School Districts: Selected State Example\***  
**(In Wisconsin a Rural School District Benefits from a Cooperative Agreement with the University)**

	Milwaukee School District, Wisconsin 92,283 Students	Madison Metropolitan School District 23,191	River Falls School District Wisconsin 2,784 Students
Cost of T-1 line (1.5 mbps), per month	\$800	\$600	\$250 5 Year Contract
Cost of Internet Access, per month	\$500 147 Schools	\$500	Internet Included in Monthly T-1 Charge 5 Schools
Contract terms	District Contract	Private Service Provider	Contract with University

\*Based on informal survey and interviews conducted by American Association of School Administrators and the Consortium for School Networking, August 1996.

**Table X**  
**Telecommunications Costs for Big City School Districts: Four Examples\***

	Atlanta Independent School District 97 Schools 59,843 Students	San Diego Unified School District 160 Schools 133,000 Students	Detroit Public Schools 287 Schools 170,000 Students	Omaha Public Schools 80 Schools 44,000 Students
Cost of T-1 line (1.5 mbps), per month	\$220 for a 56 kb Leased Data Circuit.	\$340 for T-1 \$135 for 56 kb	\$500	Seventy 56 kb \$80 each Eleven T-1 \$413 each
Cost of Internet Access, per month	\$200 Per School	Direct Connection to the Internet	\$13,500 Per Year	\$564 for District
Contract terms	State Mandates Equal Pricing Structure	Contract with CERFNet	Standard Tariff from the State PSC	Tariffed Rate

\*Based on informal survey and interviews conducted by the Council of Greater City Schools, August 1996.